

# **Session B:**

## **Fostering and Recruiting Internationally**

## **Competitive Human Resources**

## **Internationalization of Education: POSTECH Experience**

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### **ABSTRACT**

POSTECH was established in 1986 as Korea's first research-oriented science and technology university. Implementing the founding philosophy of educating a small number of bright students in a research-oriented environment, POSTECH has in its short 20-year history, become the top university in Korea and one of the leading science and technology universities in Asia.

In recent years, the idea of internationalization of education has been the subject of much discourse for universities world-wide. Universities are continuously seeking ways to internationalize their campus and curriculum to provide students with a global frame of mind to answer growing demand for talented, globalized individuals.

POSTECH, in its effort, has pursued providing students' opportunities to participate in outbound programs, recruitment of international students and other international activities on campus to enhance their university experience.

With POSTECH's aim to become one of the world's top 20 research-oriented universities by the year 2020, internationalization is a key strategic policy which the university will aggressively pursue.

## **Internationalization of Education : POSTECH Experience**



**POHANG UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

February 2007

[www.postech.ac.kr](http://www.postech.ac.kr)

POSTECH Overview



- 1) PAL: Pohang Accelerator Laboratory
- 2) RIIST: Research Institute of Industrial Science and Technology
- 3) Expected to open in July 2007

Thinking of Science, the Nation and the Future

I. POSTECH Overview

## II. Internationalization of Education

### III. Conclusion & Suggestions

Thinking of Science, the Nation and the Future

POSTECH Overview

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- Founded in 1986
  - First research-oriented university in Korea
  - 1,638,135 m<sup>2</sup> Land area  
325,362 m<sup>2</sup> Building area
  - Faculty: 229  
Researcher: 698  
Staff: 206  
Student: 2,822 (Graduate 1,5

POSTECH Overview

מִתְּבָרֶךְ יְהוָה כִּי־בְּרָכָה יְהוָה וְלֹא־בְּקַדְשָׁה

- Objective**

  - Continual generation of research achievements with high academic and industrial impact

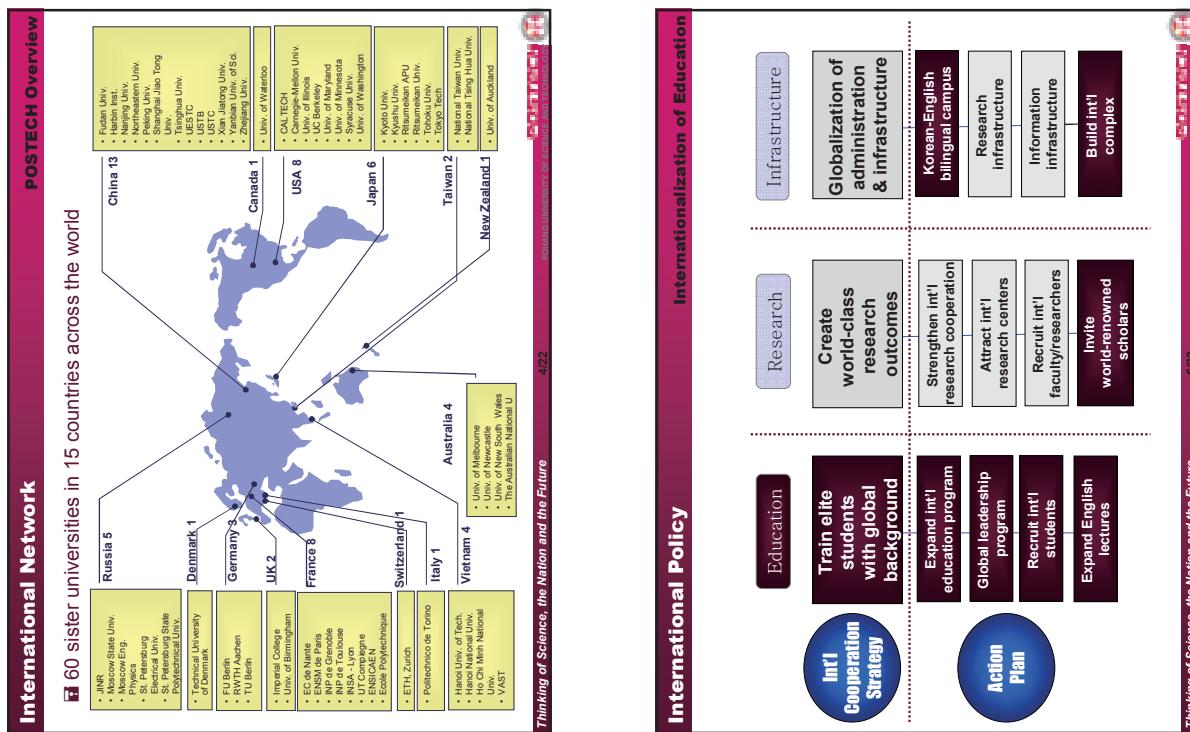
Strategy : Selection & Concentration

- Globalization

The diagram consists of three overlapping circles arranged in a triangle. The top circle is labeled "2. Research" and contains the text: "• Promote core areas of research", "• Interdisciplinary education/research cooperation". The bottom-left circle is labeled "1. Education" and contains the text: "Accentuate strengths of small-class sized research universities". The bottom-right circle is labeled "3. World-class faculty" and "4. Globalization" (partially visible) and "5. Financial resources" (partially visible).

Founding Principles

Thinking of Science, the Nation and the Future 3/22



| Expand Int'l Education Programs – Planned  |      | Internationalization of Education |
|--|------|-----------------------------------|
| <b>I Study Abroad Program (Semester and Year-long Program)</b>   |      |                                   |
| To expand outgoing students for semester & year-long program (students' need)<br>Solve the imbalance problem of exchange student numbers |      |                                   |
| Student Limit: 10 (annually)<br>Cost: Pay tuition fees (negotiable)  |      |                                   |
| Credit Transfer: Same as exchange program<br>Partner University: U of Minnesota, UC Berkeley, U of Columbia and etc                      |      |                                   |
| <b>I Internship Program (Summer and Winter)</b>  |      |                                   |
| Internship or Research Program at overseas universities<br>Exchange students among member countries through IAESTE*                      |      |                                   |
| Student Limit: 20 (annually)<br>Cost: Living Expenses & stipend (negotiable)   |      |                                   |
| Credit Transfer: N/A<br>Partners: University, Company, Research Institution  |      |                                   |
| *IAESTE: The International Association for the Exchange of Student for Technical Experience  |      |                                   |
| <i>Thinking of Science, the Nation and the Future</i>  | 8/22 | Internationalization of Education |

| Global Leadership Programs  |      | Internationalization of Education |
|---|------|-----------------------------------|
| <b>I Global Leadership Programs for POSTECH Students</b>  |      |                                   |
| Annual Student Camp by 17 AEAFU member universities<br>1997-2006 Outgoing Students: 64  |      |                                   |
| Bang Doshie Global Expedition<br>Funded with an endowment from Mrs. BANG Doshie<br>2000-2005 Outgoing Students: 46              |      |                                   |
| Study Tour for Student Leaders<br>Visit several universities and research institution abroad<br>2004-2005 Outgoing Students: 28 |      |                                   |
| <i>Thinking of Science, the Nation and the Future</i>   | 9/22 | Internationalization of Education |

| Recruit International Students  |       | Internationalization of Education |
|---|-------|-----------------------------------|
| <b>I POSTECH-Partner Universities Networking Convention 2005</b>  |       |                                   |
| <b>Purpose</b>  |       |                                   |
| Invite partner universities' administrators<br>Introduce POSTECH campus, education environment and degree program<br>Exchange ideas and future cooperation      |       |                                   |
| <b>Participants</b>   |       |                                   |
| 12 from 10 universities in China and Taiwan<br>Fudan U, HIT, Nanjing U, NTU, SJTU, Peking U, Tsinghua U, USTB, USSTC, Zhejiang U                                |       |                                   |
| <b>Main Program</b>   |       |                                   |
| Campus tour, degree program introduction and department visit<br>Meeting with President and home university alumni<br>Networking and discuss future cooperation |       |                                   |
| <i>Thinking of Science, the Nation and the Future</i>   | 11/22 | Internationalization of Education |

| Int'l Student Enrollment / Department (2002~2006) |      |      |      |      |      |       |
|---|------|------|------|------|------|-------|
| Department  | 2002 | 2003 | 2004 | 2005 | 2006 | Total |
| Mathematics                                       | 1    | 1    | 1    | 1    | 1    | 2     |
| Physics   | 2    | 2    | 1    | 3    | 10   | 2     |
| Chemistry   | 1    | 2    | 1    | 2    | 3    | 3     |
| Life Science                                      | 4    | 1    | 2    | 1    | 7    | 14    |
| MSE   | 1    | 1    | 1    | 1    | 3    | 22    |
| ME  | 1    | 1    | 1    | 1    | 5    | 1     |
| IME   | 2    | 3    | 2    | 3    | 10   | 26    |
| EEE   | 2    | 1    | 1    | 1    | 4    | 2     |
| CSE   | 2    | 1    | 1    | 1    | 4    | 17    |
| Chemical Eng                                      | 2    | 1    | 1    | 1    | 4    | 4     |
| SEE   | 3    | 2    | 2    | 5    | 12   | 4     |
| GSIT  | 1    | 3    | 3    | 1    | 8    | 2     |
| GIFT  | 9    | 6    | 13   | 15   | 47   | 11    |
| Total   | 28   | 19   | 25   | 30   | 17   | 140   |

Thinking of Science, the Nation and the Future 12/22 POSTECH University Vision 2020

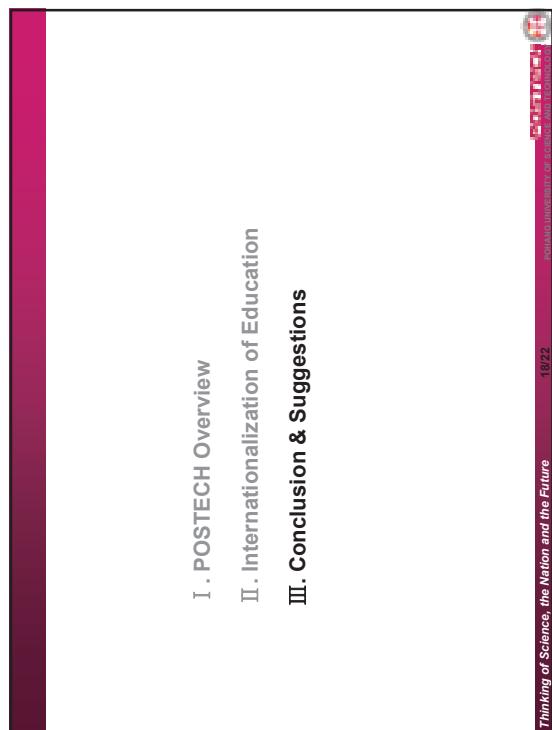
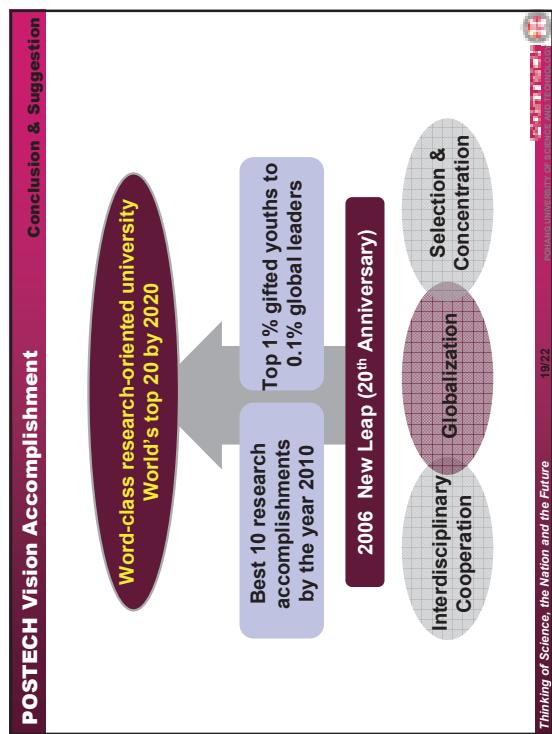
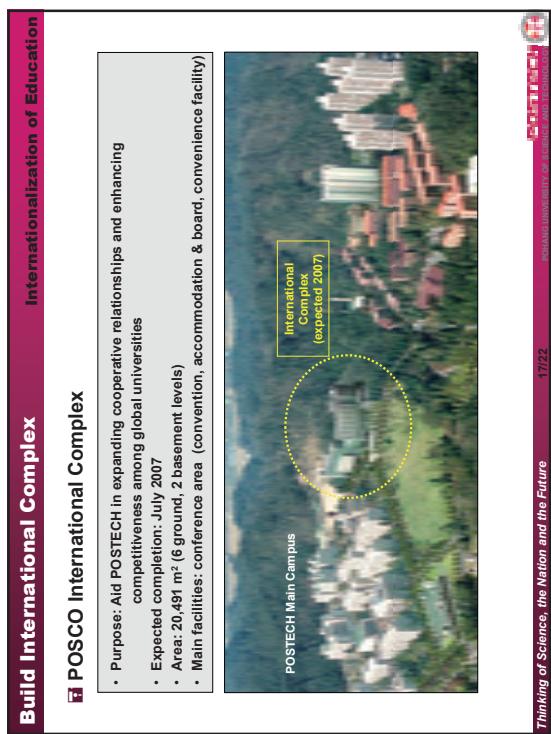
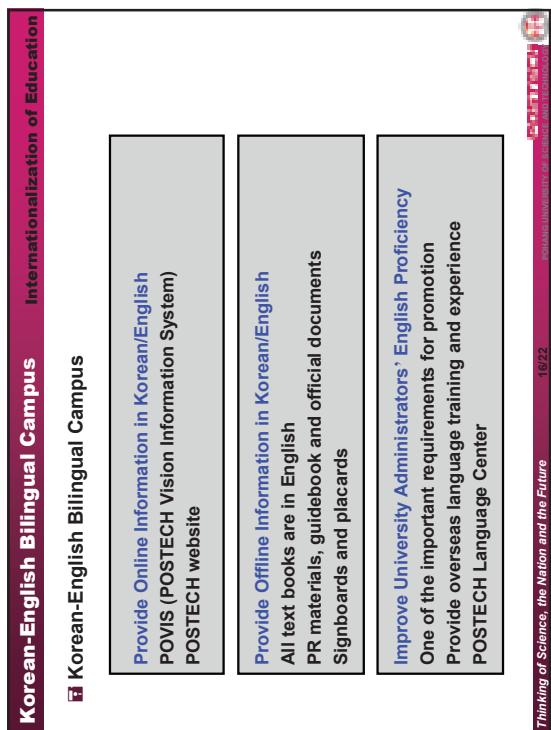
| Increase English Lectures (2002~2006) |       |       |       |       |      |      |
|---------------------------------------|-------|-------|-------|-------|------|------|
| Year                                  | 2003  | 2004  | 2005  | 2006  | 2007 | 2010 |
| Undergraduate                         | 14.3% | 17%   | 17.6% | 16.8% | 30%  | 100% |
| Graduate                              | 29.6% | 28.3% | 26%   | 33.5% | 50%  | 100% |
| Total                                 | 22%   | 22.7% | 21.8% | 25.2% | 40%  | 100% |

● University Development Key Indicators for POSTECH Vision 2020

| Policy to Increase English Lectures                              |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Korean Government promotes English lectures                      |  |  |  |  |  |  |
| - BK21 Program, IT Scholarship                                   |  |  |  |  |  |  |
| Recruit international faculty and students                       |  |  |  |  |  |  |
| New faculty are supposed to teach ALL lectures in English        |  |  |  |  |  |  |
| Provide additional stipend to faculty who gives English lectures |  |  |  |  |  |  |
| Promote English seminars and group meetings                      |  |  |  |  |  |  |

Thinking of Science, the Nation and the Future 14/22 POSTECH University Vision 2020

| Recruit International Students  |        | Internationalization of Education   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
|---|--------|---|--|---------|--------|-----|----|----|---|--------|----|-----------|----|---------|----|---------|---|--------|----|-------|---|-------|----|--------|---|--------|---|--------|----|-------|-----|
| <b>1 Incoming Exchange Program</b>  |        | <b>1 Incoming Students Number (1988~2006)</b>   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| <b>General / Exchange Program</b>   |        | <b>1 Incoming Students Number (1988~2006)</b>   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| <ul style="list-style-type: none"> <li>• Take courses</li> <li>• Semester or year-long program</li> </ul> |        | <table border="1"> <thead> <tr> <th>Country</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>USA</td> <td>25</td> </tr> <tr> <td>UK</td> <td>4</td> </tr> <tr> <td>Canada</td> <td>12</td> </tr> <tr> <td>Australia</td> <td>14</td> </tr> <tr> <td>Germany</td> <td>22</td> </tr> <tr> <td>Denmark</td> <td>1</td> </tr> <tr> <td>France</td> <td>26</td> </tr> <tr> <td>Japan</td> <td>2</td> </tr> <tr> <td>China</td> <td>17</td> </tr> <tr> <td>Taiwan</td> <td>4</td> </tr> <tr> <td>Russia</td> <td>2</td> </tr> <tr> <td>Others</td> <td>11</td> </tr> <tr> <td>Total</td> <td>140</td> </tr> </tbody> </table> |  | Country | Number | USA | 25 | UK | 4 | Canada | 12 | Australia | 14 | Germany | 22 | Denmark | 1 | France | 26 | Japan | 2 | China | 17 | Taiwan | 4 | Russia | 2 | Others | 11 | Total | 140 |
| Country   | Number |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| USA   | 25     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| UK  | 4      |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Canada  | 12     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Australia   | 14     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Germany   | 22     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Denmark   | 1      |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| France  | 26     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Japan   | 2      |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| China   | 17     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Taiwan  | 4      |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Russia  | 2      |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Others  | 11     |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Total   | 140    |   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| <b>Research Program</b>   |        | <ul style="list-style-type: none"> <li>• Participate in research projects</li> <li>• Several months or year-long program</li> </ul>   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| <b>Combined Program</b>   |        | <ul style="list-style-type: none"> <li>• Combination of the two programs above</li> </ul>   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |
| Thinking of Science, the Nation and the Future 13/22 POSTECH University Vision 2020                       |        | Thinking of Science, the Nation and the Future 15/22 POSTECH University Vision 2020   |  |         |        |     |    |    |   |        |    |           |    |         |    |         |   |        |    |       |   |       |    |        |   |        |   |        |    |       |     |



| Suggestions  | Conclusion & Suggestion  |
|--|--|
| <p><b>I AEARU Exchange Programs</b></p> <p><b>Asian community programs among AEARU members</b></p> | <p><b>Main Activities</b></p> <ul style="list-style-type: none"> <li>Student &amp; teacher exchanges</li> <li>Joint development of study program</li> <li>International intensive program</li> <li>Thematic networks between departments &amp; faculties</li> <li>Languages courses</li> <li>AEARU credit transfer system</li> </ul> |

| Suggestions  | Conclusion & Suggestion  |
|--|--|
| <p><b>I AEARU Exchange Program</b></p> <p><b>Association of East Asian Research Universities, AEARU</b><br/>17 Universities in East Asia from China, Hong Kong, Japan, Korea and Taiwan<br/>Activities: 10 science &amp; technology workshops and 2 student camps annually</p> <pre>     graph TD       POSTECH((POSTECH)) --- IohokuU((Iohoku U))       POSTECH --- SNU((SNU))       POSTECH --- KAIST((KAIST))       POSTECH --- TsinghuaU((Tsinghua U))       POSTECH --- PekingU((Peking U))       POSTECH --- NanjingU((Nanjing U))       POSTECH --- FudanU((Fudan U))       POSTECH --- NTU((NTU))       POSTECH --- HKUST((HKUST))       POSTECH --- USTC((USTC))       POSTECH --- KyotoU((Kyoto U))       POSTECH --- OsakaU((Osaka U))       POSTECH --- UofTokyo((U of Tokyo))       POSTECH --- TsukubaU((Tsukuba U))       POSTECH --- TokyoTech((Tokyo Tech))       POSTECH --- TsingHuaHejichiu((Tsing Hua-Hejichiu))   </pre> | <p><b>Thinking of Science, the Nation and the Future</b> 20/22</p> |

| Q & A   | Conclusion & Suggestion  |
|---|--|
| <p><a href="http://www.postech.ac.kr">www.postech.ac.kr</a></p> | <p>For more information contact<br/>POSTECH International Affairs Office at<br/>iao@postech.ac.kr</p> <p><b>Thinking of Science, the Nation and the Future</b> 22/22</p> |

**ISSUES AND CHALLENGES FACING RITSUMEIKAN UNIVERSITY'S POLICIES  
FOR INTERNATIONAL STUDENTS**

**~ Focusing On the Recruitment of and Support for Incoming Students ~**

**Kiyoko TANAKA**

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Office of International Education at Kinugasa Campus

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**ABSTRACT**

**1. Transformation of Ritsumeikan University's Exchange Programs in the Past Two Decades**

**A) Increase in the Number of Partner Schools and International Students**

With the goal of globalizing the whole campus under the slogan of "Ritsumeikan University Open to the World" the number of universities Ritsumeikan University (RU) has formed exchange agreements with and that of international students has grown significantly since the opening of the Faculty of International Relations in 1988. Whereas the number of institutions RU had agreements with was only 4 in 4 countries in 1986, it has grown to 260 in 51 area/countries in January 2007. Likewise, the number of degree-seeking international students and that of non-degree short-term international students (students attending RU for 1 or 2 semesters) increased from 60 to 818 and from 6 (from 4 universities in 3 countries) to 124 (from 59 universities in 16 area/countries) respectively during the period between 1986 and October, 2006.

**B) Advantages of Student Exchange**

Student exchange has a number of positive effects not only on international students seeking educational opportunities in Japan, but also on Japanese students who are given opportunities to interact with these students from different parts of the world, as well as the university itself. The mere presence of international students heightens the awareness of the world for domestic students. Student exchange also has the effect of revitalizing research as well as of strengthening networks among universities around the world. RU is currently working toward the goal of accepting a total of 2,200 international students, including degree-seeking, short-term non-degree-seeking and study tour students, by 2010, which is part of RU's larger drive to create a "multicultural campus".

## **2. Recruitment of and Support for International Students: Where We Stand and Where We are Heading**

### A) Recruitment of International Students

As part of its recruitment efforts, RU has participated in the annual Japan Education Fair hosted by the Japan Student Services Organization, held in Japan and overseas, where Japanese universities promote their schools and recruit students from overseas. RU also recruits international students through general admission tests, held twice a year, and a special examination designed for students nominated by Japanese-language schools in Japan.

### B) Assistance for Degree-Seeking International Students

Degree-seeking international students receive a number of financial and living assistances from the university and their Japanese peers through tutoring and entertainment activities throughout the year. As part their financial assistance, these students receive partial tuition reductions as well as a partial refund of health insurance premiums, a scheme supported by the Ritsumeikan University Parents Association for Student Education Assistance.

### C) Assistance for Short-Term Non-Degree International Students

RU accepts short-term non-degree international students twice a year, in April and September. For these students, RU offers small group intensive Japanese language courses divided into 5 levels, Japanese traditional arts courses taught by the celebrated leaders of Kyoto's traditional arts and courses taught in English. Moreover, RU is providing short-term international students with various living and study assistances by providing them with affordable housing options as well as consultation in Chinese, Korean and English by native speakers of these languages.

### D) Challenges Facing RU's Exchange Programs

International students generally have good academic records. The number of international students who find jobs at first-rate companies after graduation has increased sharply in recent years. RU is confident that the international students who attend RU have a great potential to excel in the societies they are from as well as in the larger world. However, RU still faces a number of challenges that need to be addressed, such as problems related to the shortage of housing and the courses taught in English, transfer of credits between RU and students' home universities, and a lack of

scholarship funds for qualified students. Moreover, employment rates and internship participation rates for international students remain low.

### **3. Challenges in Recruiting Highly Competent Students**

#### A) Difficulties in Recruiting Competitive Students

Japan has entered an era in which the number of students wishing to attend a university almost equals the number of spots available in the existent universities. Therefore, the competition among universities in securing competent students has become more severe than ever before. In that respect, it would hardly be sufficient to rely on the existing entrance examination system to recruit internationally competitive students.

#### B) Future Tasks

In order to attract the best students, RU needs to improve the quality of classes offered to students, support cutting-edge research and expand economic assistance to qualified students. Moreover, RU needs to take full advantage of the rich educational and cultural history of the greater Kyoto area (where both Kinugasa Campus and Biwako-Kusatsu Campus are located), the highly effective career planning and internship services and the diverse curriculum offered to both undergraduate and graduate students at RU. Only by offering the most attractive educational and living opportunities to students would RU be able to attract the most competitive students in this era of severe competition among universities.

2<sup>nd</sup> University Administrators Workshop  
Session B: Fostering and Recruiting Internationally Competitive Human Resources

## ISSUES AND CHALLENGES FACING RITSUMEIKAN UNIVERSITY'S POLICIES FOR INTERNATIONAL STUDENTS

~Focusing on the Recruitment of and  
Support for Incoming Students~

Kiyoko TANAKA  
Assistant Administrative Manager  
Office of International Education at Kinugasa Campus,  
Ritsumeikan University

### ~OUTLINE~

#### Recruitment of and Support for Incoming Students

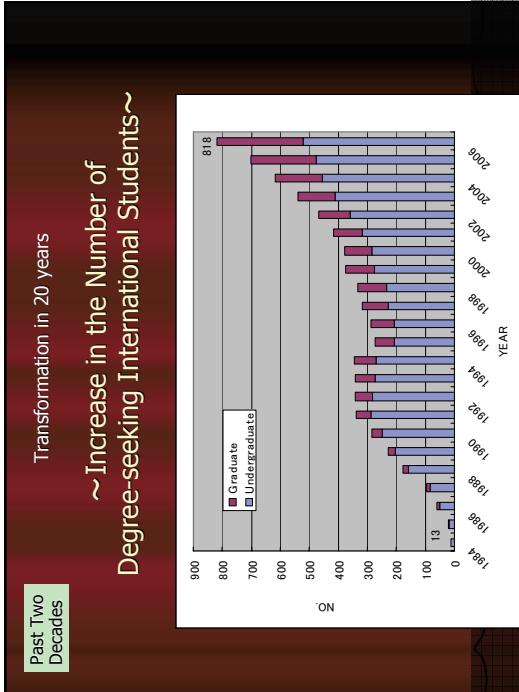
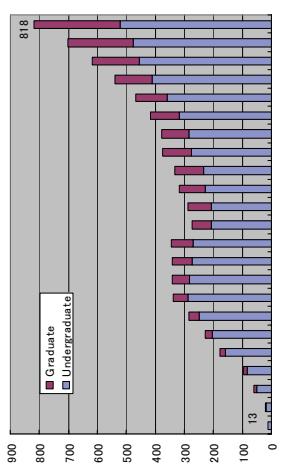
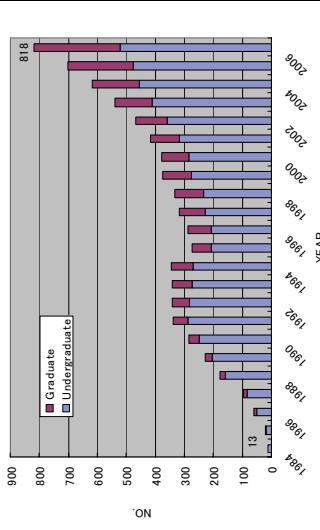
- Transformation in the Past Two Decades
- Where We Stand and Where We Are Heading
- Challenges in Recruiting Highly Competent Students

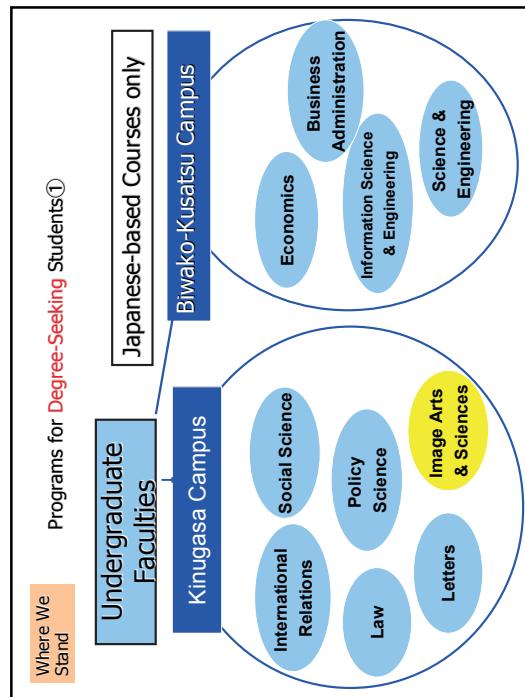
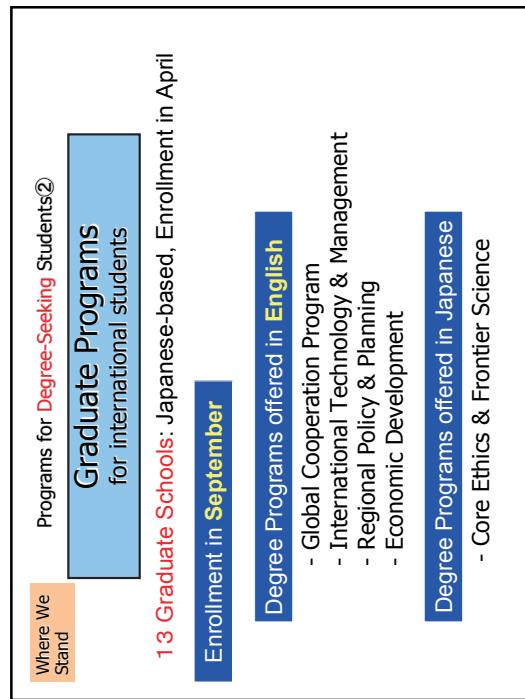
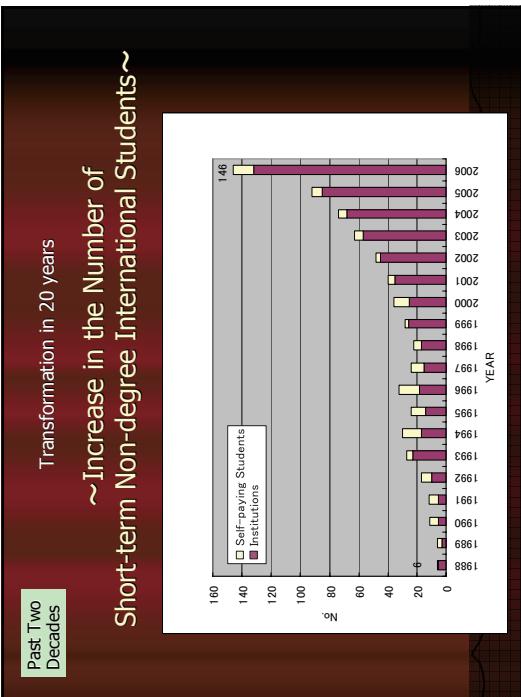
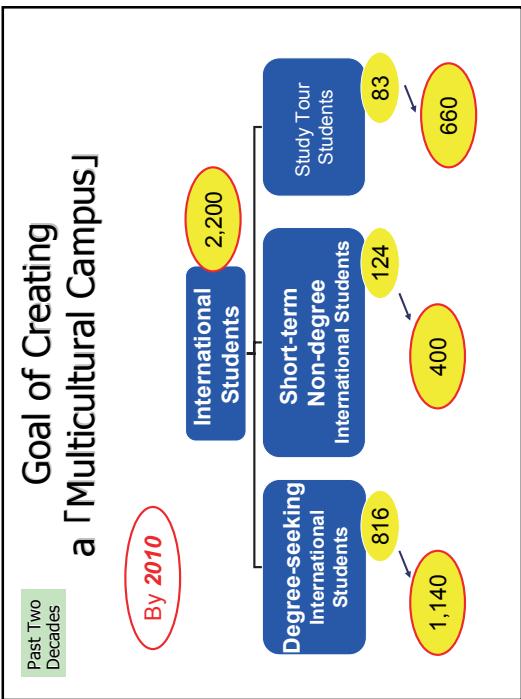
- ~Advantages of Student Exchange~
- Contribution to international human resource development
  - Benefits for Domestic Students
  - Revitalization of Research
  - Strengthening of Networks

Past Two Decades

Transformation in 20 years

~Increase in the Number of  
Degree-seeking International Students~





Where We Stand  
Recruitment of Degree-seeking International Students

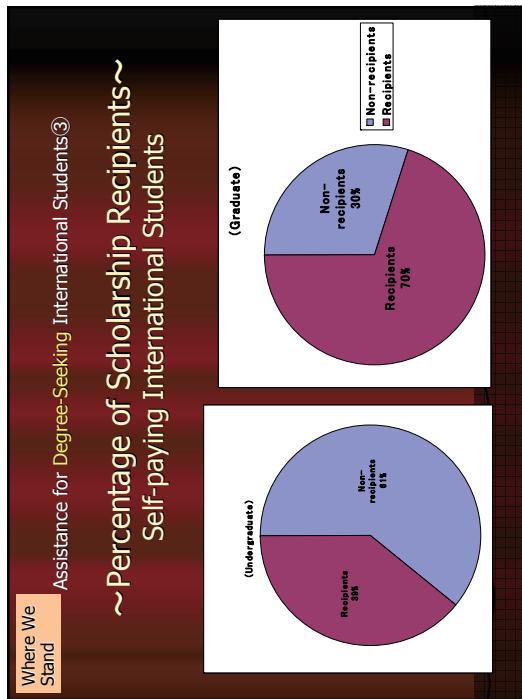
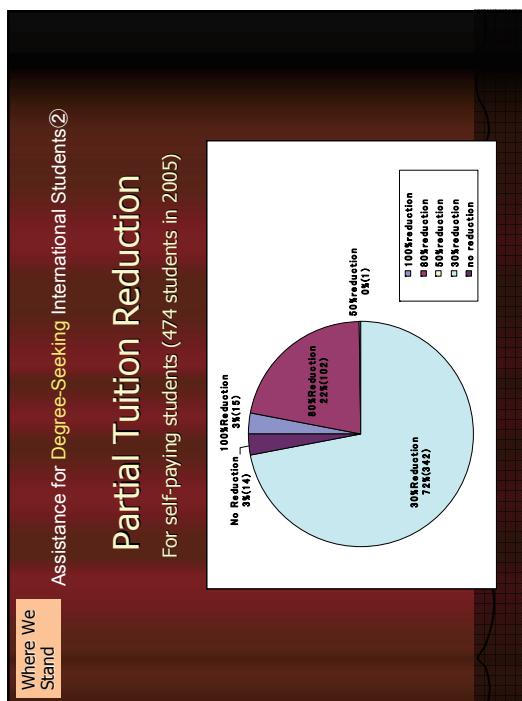
### ~Recruitment Efforts~

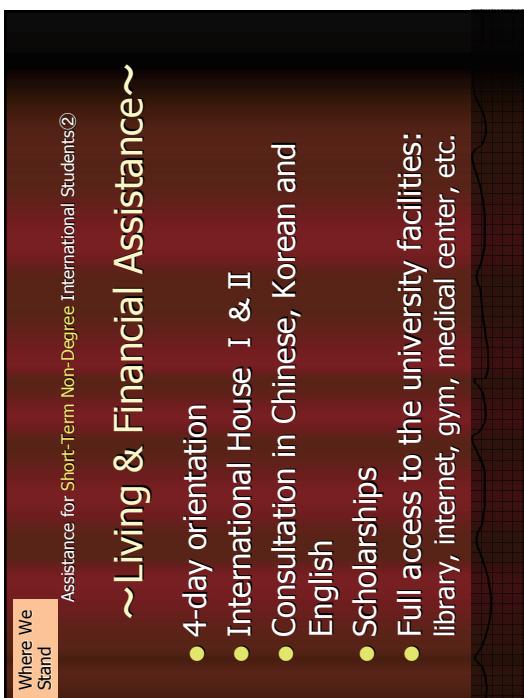
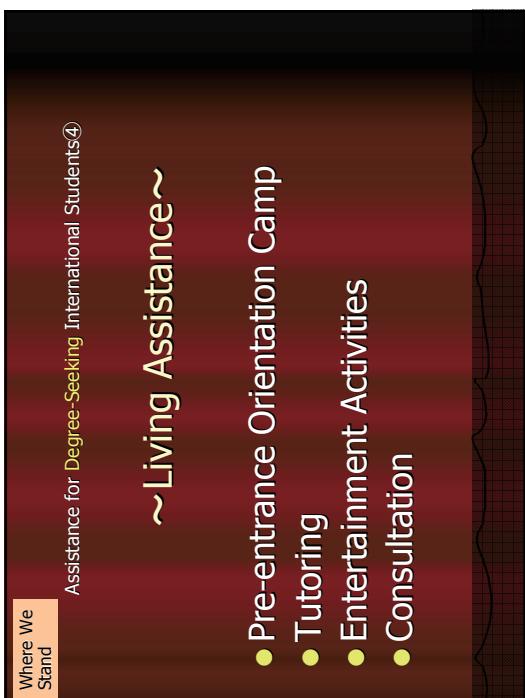
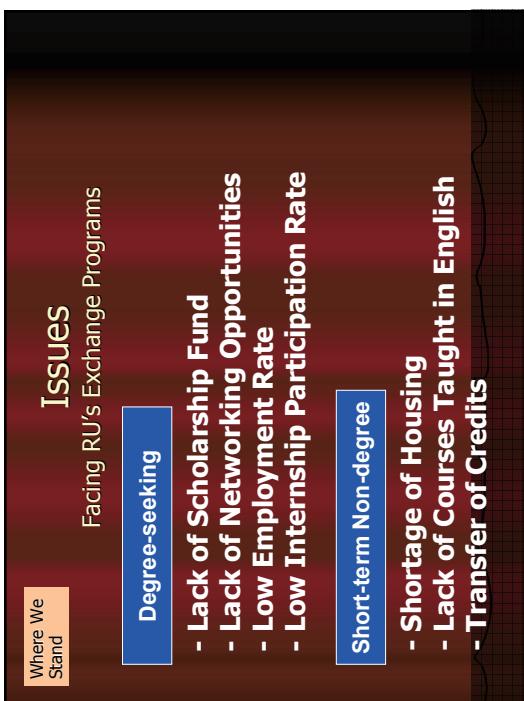
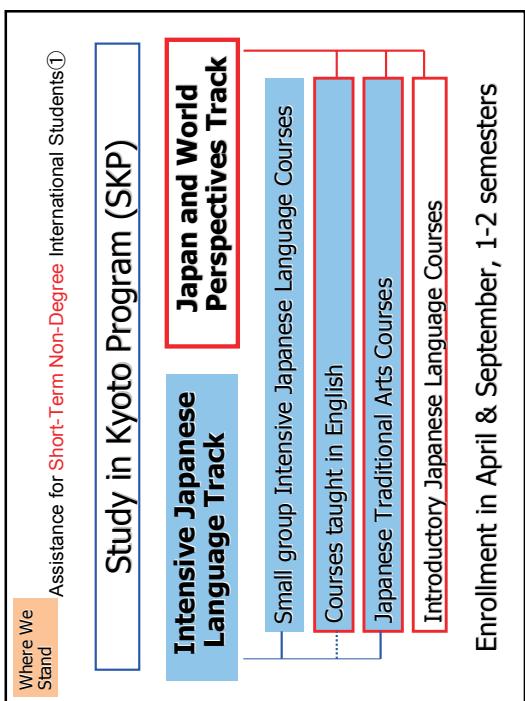
- Participation in Japan Education Fair hosted by JASSO (In Tokyo, Osaka, Pusan, Seoul, Taipei)
- Visit to Japanese language schools
- General admission tests (twice a year)
- Special exam designed for students nominated by Japanese-language schools

Where We Stand  
Assistance for Degree-seeking International Students①

### ~Financial Assistance by RU~

- Partial tuition reduction
- Partial refund of health insurance premiums
- Various scholarships
- Student loans for university expenses





**Challenges** Challenges in Recruiting Highly Competent Students①

## RU's Advantages

- Rich educational & cultural history of the greater Kyoto area
- Highly effective career planning & internship services
- Diverse curriculum
- Active extracurricular activities
- More than 100 year's history

**Challenges** Challenges in recruiting highly competent students②

## Future Tasks

### Education

- Improving the quality of classes**  
e.g. Teaching, Bridging the gap between research & education, Diversity of courses in English, Class evaluation
- Starting new courses**  
e.g. Additional Japanese language courses, Internship program for short-term international students
- Creating a internationally compatible system**
- Support for cutting-edge research**

**Challenges** Challenges in recruiting highly competent students③

## Future Tasks

### Student Support

- Support for Job Placement**  
e.g. Support for Career Seeking Activities, Encouraging Internship participation
- Alumni Networking**  
e.g. Organizing Alumni, Strengthening the overseas offices
- Expanding Financial Assistance**  
e.g. Securing Scholarship Funds
- Securing New Housing**

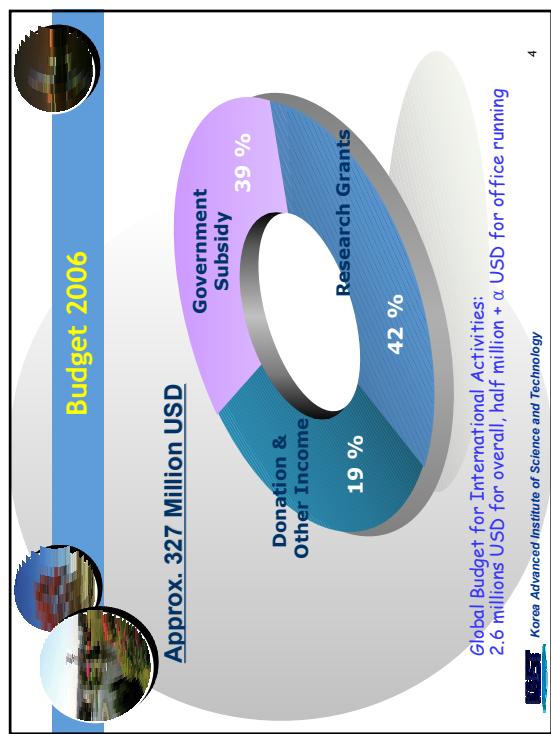
**Challenges** Challenges in recruiting highly competent students④

## Thank you for your attention!



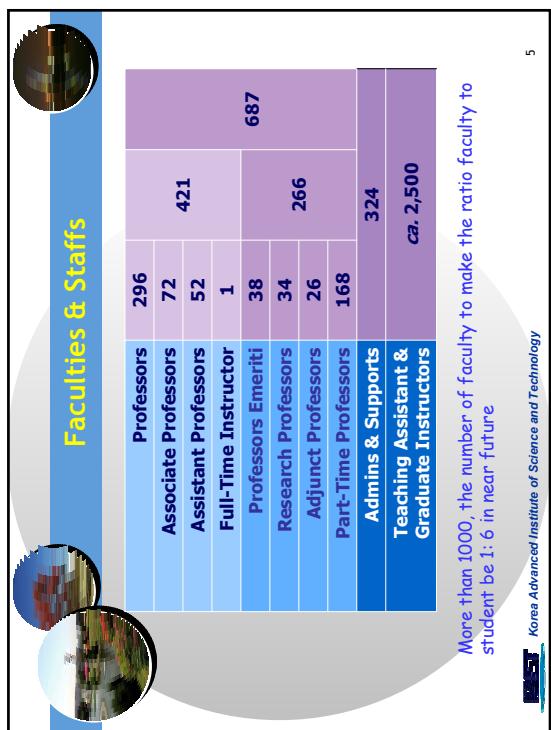
Welcome to Ritsumeikan

Ritsumeikan University  
Our Educational Philosophy  
Peace & Democracy

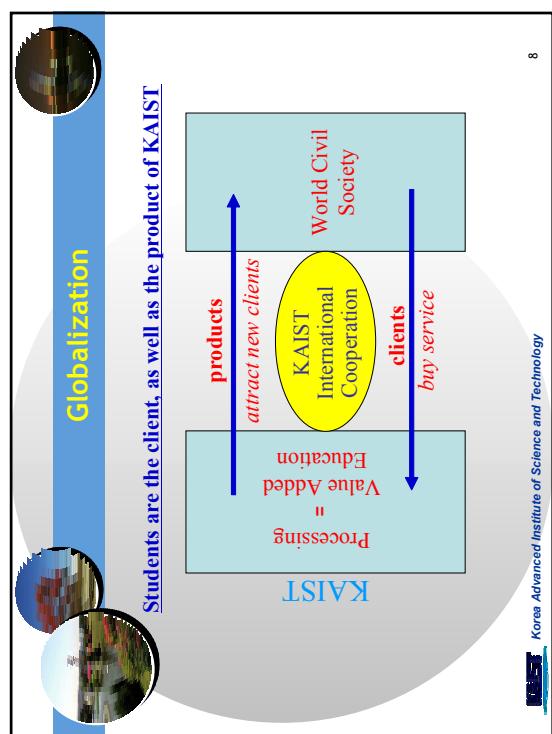




6



5



8



7

## Globalization

**International Relations for Students** is one of the high value added educational process whose basic philosophy is as below

|                          | knowledge | experience | human networking |
|--------------------------|-----------|------------|------------------|
| Social Culture & Systems | ★         | ★          | ★                |
| Industrial/biz culture   | ★         | ★          | ★                |
| Language                 | ★         | ★          | ★                |

**Non-movers** can also be internationalized by the presence of massive incoming foreigners, and lectures in foreign language.

9 Korea Advanced Institute of Science and Technology

## KAIST-UNESCO COOPERATION

**ACCESS-net**  
Association of Computer Centers for Sustainable Synergy - network

10 Korea Advanced Institute of Science and Technology

## Philosophy

**Project EEE : Fifty Foreign High School Graduates**

Conditions:

- Not older than a year
- English speaking
- Excellent school records
- Profile of future leader of the country

11 Korea Advanced Institute of Science and Technology

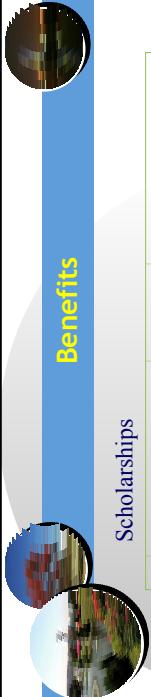
## Conditions

**Training of students in an environment of international teamwork to meet challenge of scientific, technological and human cultures that are different from their own :**

- ❖ to develop their capability of adaptation to the international scientific and engineering environment
- ❖ to develop their capacity of innovation in science and technology
- ❖ to develop the autonomy and opening of their vision to the new frontier
- ❖ to provide them with chance to create natural friendship
- ❖ to give a true international dimension to KAIST by establishing a truly internationalized educational environment
- ❖ to create true bilingual campus
- ❖ to extend world widely the zone of influence of KAIST through "Training of Trainers"

12 Korea Advanced Institute of Science and Technology

## KAIST-UNESCO COOPERATION



### Benefits

**Scholarships**

| N° | Item                  | amount (US\$) | Comment                             |
|----|-----------------------|---------------|-------------------------------------|
| 1  | Tuition               | 15000         | exemption                           |
| 2  | Parent Trust Fund     | 2000          | exemption                           |
| 3  | Medical Insurance     | 410           | proxy payment                       |
| 4  | Allowance             | 3600          | paid 300\$/month                    |
| 5  | Settling-in Allowance | 2500          | paid 200\$/month<br>first year only |
|    | First year            | 23410         | balance: +2695 \$/year              |
|    | Second year and after | 20715         | balance: +2955\$/year               |

*Note: Tuition fees vary according to students academic performance of the previous year.  
Monthly allowance of 300\$ covers largely boarding & lodging fees.*

Korea Advanced Institute of Science and Technology

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## KAIST-UNESCO COOPERATION



**UNESCO's Worldwide Network**

Get help from its organization and competency

- over 220 countries
- all delegation in one place
- good cooperation with educational authority
- easy help from educational specialists

Korea Advanced Institute of Science and Technology

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## KAIST-UNESCO COOPERATION



### Result of Operation

| Country      | Applicants | Admitted | %    |
|--------------|------------|----------|------|
| Azerbaijan   | 8          | 4        | 50   |
| Bangladesh   | 1          | 1        | 100  |
| Brazil       | 1          | 1        | 100  |
| Chile        | 1          | 1        | 100  |
| China        | 8          | 5        | 62,5 |
| India        | 1          | 0        | 0    |
| Iran         | 1          | 0        | 0    |
| Kazakhstan   | 1          | 1        | 100  |
| Pakistan     | 14         | 2        | 14,3 |
| Romania      | 7          | 1        | 14,3 |
| Rwanda       | 4          | 1        | 25   |
| South Africa | 1          | 0        | 0    |
| Tajikistan   | 9          | 2        | 22,2 |
| Ukraine      | 11         | 6        | 54,5 |
| Uzbekistan   | 13         | 4        | 30,8 |
| Vietnam      | 24         | 18       | 75   |
| Total        | 105        | 47       | 44,8 |

Korea Advanced Institute of Science and Technology

15



Development Plan of International Relation Activities for Global Campus Project

*The Quality*

Creativeness  
Imaginativeness  
Innovativeness

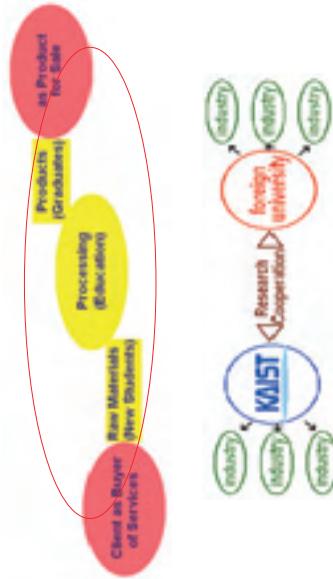
Development Plan of International Relation Activities for Global Campus Project

*The Continuity*

Future  
Present  
Past

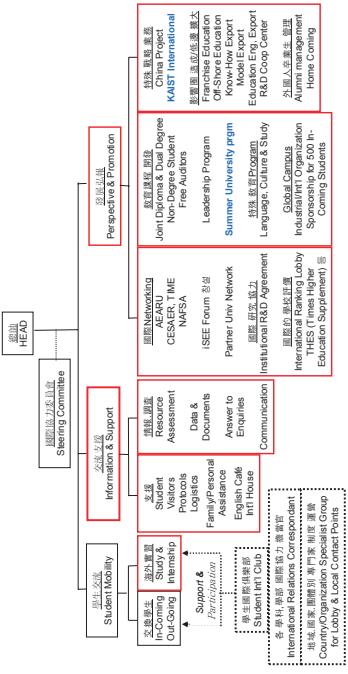
Development Plan of International Relation Activities for Global Campus Project

*The Goals*



Development Plan of International Relation Activities for Global Campus Project

*The Tasks*



## Tohoku University's Strategy for Human Resources

**Hideaki Hirayama**

Director, International Exchange Division  
Tohoku University

### ABSTRACT

Tohoku University enacted Principles of Strategy for International Exchange on 8 March 2005 and we have established GOC (Global Operations Centre) on the first day of June 2005 supported by the Ministry of Education, Culture, Sports, Science and Technology.

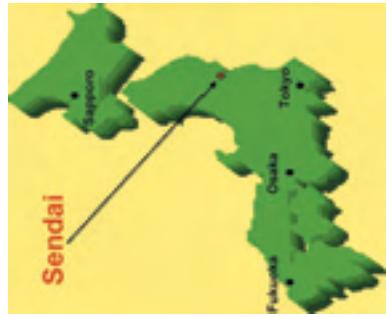
The Centre will be an administrative headquarters for all matters related to international exchanges, and will serve to devise and put into action a united set of strategies in all faculties.

The Center is aimed to create an environment for academic staff to make Tohoku University as an internationally competitive university with highly acclaimed world-class research and education and to ensure the university is well-equipped to maintain a position of excellence in the global academic community.

Last year, Tohoku University introduced a Double Degree Programs with French Grandes Ecoles and Joint Educational Program with Tsinghua University in China to promote exchange of well-selected students with Prominent Educational Institutions overseas.



TOHOKU UNIVERSITY Sendai, Japan



*Location of the City of Sendai*

- In the North-East of Japan
- Distance from Tokyo 350km
- Travel time from Tokyo (by bullet train) 1h35m

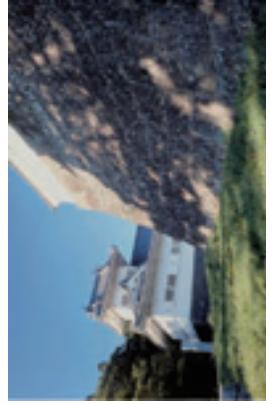
*Population of the City*

1,025,647



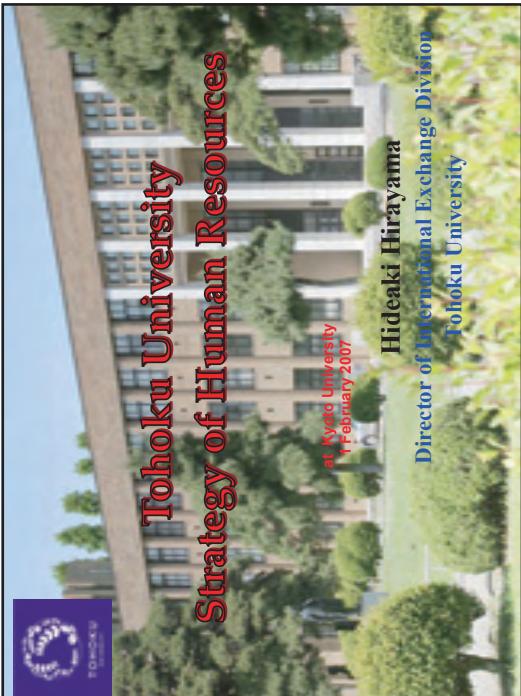
TOHOKU UNIVERSITY Sendai, Japan

**Sendai is a capital city in the Northern part of Japan**



The site of Aoba Castle, where Tohoku University is located.

3



Tohoku University  
Strategy of Human Resources

at Kyoto University  
1 February 2007

Hideaki Hirayama  
Director of International Exchange Division  
Tohoku University



TOHOKU UNIVERSITY Sendai, Japan

**Sendai is surrounded by natural beauty:**



Matsushima, a picturesque seacoast,

2

**TOHOKU UNIVERSITY** Sendai, Japan

Chika Kuroda, the first woman, Tohoku U, admitted a female student for the first time among all the national universities in Japan in 1913.

Founder of the modern Chinese literature, Lu Xun ('Rojin') entered Tohoku U in 1904

Dr. Albert Einstein Visited Tohoku University on Dec. 3, 1922

Dr. Niels Bohr and Mrs. Bohr visited Tohoku University on May 2, 1937

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**TOHOKU UNIVERSITY** Sendai, Japan

**Location of the Campuses in Sendai City**

7

**TOHOKU UNIVERSITY** Sendai, Japan

Founded in 1907 as the 3rd Imperial University

4

**TOHOKU UNIVERSITY** Sendai, Japan

**Research and Education Organization**

|                               |  |
|-------------------------------|--|
| Main Library                  | Arts and Letters   |
|                               | Education  |
|                               | Law  |
|                               | Economics and Management                                       |
|                               | Sciences   |
|                               | Nursing  |
|                               | Dentistry  |
|                               | Pharmaceutical Sciences  |
|                               | Engineering  |
|                               | Agriculture  |
| Undergraduate Schools<br>(10) | Arts and Letters   |
|                               | Education  |
|                               | Law  |
|                               | Economics  |
|                               | Science  |
|                               | Medicine   |
|                               | Dentistry  |
|                               | Pharmaceutical Sciences  |
|                               | Engineering  |
|                               | Agriculture  |
| Graduate Schools              | International Cultural Studies                                 |
|                               | International Sciences   |
|                               | Lif Sciences   |
|                               | Environmental Studies  |
|                               | Educational Informatics, Research                              |
|                               | Division Education Division                                    |
| Professional Graduate Schools | Law School   |
|                               | (3) ... School of Public Policy                                |
|                               | University Hospital  |
|                               | Institute for Materials Research                               |
| Research Institutes<br>(5)    | Institute of Development, Aging and Cancer                     |
|                               | Institute of Fluid Science                                     |
|                               | Research Institute of Electrical Communication                 |
|                               | Institute of Multidisciplinary Research for Advanced Materials |

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## TOHOKU UNIVERSITY Sendai, Japan

TOHOKU UNIVERSITY Sendai, Japan  


### Number of Board Members and Staff

As of November, 2006

|                                    |       |
|------------------------------------|-------|
| President                          | 1     |
| Executive Directors                | 7     |
| Auditor                            | 2     |
| Faculty Members                    | 2,699 |
| Profs.(838)                        |       |
| Assoc. Profs.(641)                 |       |
| Lects.(176)                        |       |
| Research Assoc.(1,044)             |       |
| Administrative and technical staff | 2,436 |
| Total                              | 5,145 |

8

### Number of Students

As of May, 2006

|                      |               |
|----------------------|---------------|
| <b>Undergraduate</b> | <b>10,815</b> |
| <b>Master</b>        | <b>4,175</b>  |
| <b>Doctor</b>        | <b>2,870</b>  |
| <b>Total</b>         | <b>17,860</b> |

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## TOHOKU UNIVERSITY Sendai, Japan

### Major research projects of Tohoku University

#### The 21st Century COE Program(13)

|  |  |
|--|--|
| Future Medical Engineering based on Bio-nanotechnology   | International Center of Research & Education for Unexplored Chemistry  |
| International Center of Research & Education for Materials   | System Construction of Global-Network Oriented Information Electronics |
| System Construction of Global-Network Oriented Information Electronics                               | Center for Innovative Therapeutic Development for Common Diseases      |
| Exploring New Science by Bridging Particle-Matter Hierarchy  | Advanced Science and Technology Center for the Dynamic Earth           |
| Advanced Science and Technology Center for the Dynamic Earth   | International COE of Flow Dynamics                                     |
| Center for the Study of Social Stratification and Inequality   | Gender Law and Policy Center   |
| Comprehensive Research and Education Center for Planning of Drug Development and Clinical Evaluation |  |

10

## TOHOKU UNIVERSITY Sendai, Japan

### Mr. Koichi TANAKA, Nobel Laureate

Koichi Tanaka - Prize Award Photo



Photo: Hans Mehlum, Nobel e-Museum

|      |  |
|------|--|
| 1959 | •Born in Toyama, Japan   |
| 1983 | •Graduated from Department of Electrical Engineering, School of Engineering, Tohoku University   |
| 2002 | •Researcher in Shimadzu Corporation<br>•The Nobel Prize in Chemistry 2002<br>“The development of methods for identification and structure analyses of biological macromolecules” |
|      | •Honorary Doctor of Tohoku University  |

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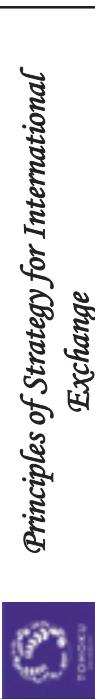
**TOHOKU UNIVERSITY** Sendai, Japan

## Citations

| National Ranking | International Ranking | Field             | Citations | Papers |
|------------------|-----------------------|-------------------|-----------|--------|
| 1                | 2                     | Materials Science | 25,185    | 4,554  |
| 2                | 14                    | Physics           | 89,139    | 9,762  |
| 5                | 21                    | Chemistry         | 53,301    | 5,919  |
| 4                | 72                    | all fields        | 302,547   | 36,583 |

Resource: ISI Essential Science Indicators™, Jan. 1995 – Apr. 2005

12



Promote the world's highest standards of research through active participation in an international academic network

Invite and gather the highly motivated, capable and talented individuals from all over the globe and cultivate international leaders who can contribute to the advancement of world development.

Communicate our accomplishments in education and research internationally and contribute them to the international community

Strengthen the foundations of research and education and increase the university's international recognition to support realization of the three above goals

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### Establishment

Global Operations Centre (GOC) was established on June 1st, 2005 as the base for international strategy of Tohoku University, financially supported under the "Strategic Fund for Establishing International Headquarters in the Universities" Program of the Ministry of Education, Culture, Sports, Science and Technology.

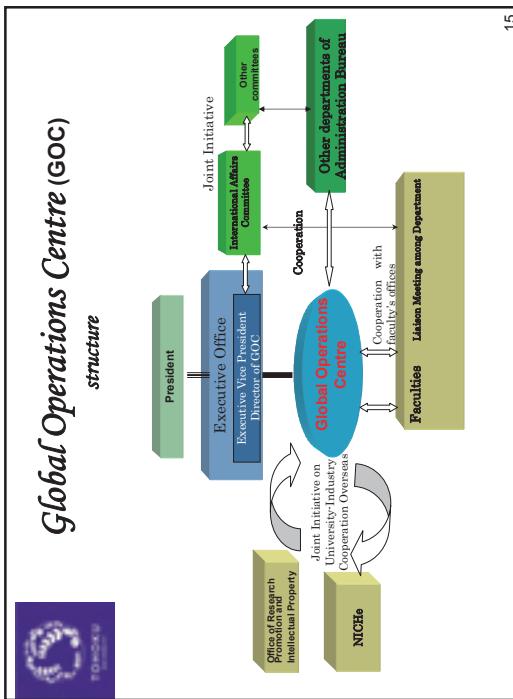
### Function

This Centre will be the administrative headquarters for all matters related to international exchanges and will serve to devise and activate a united set of strategies in all its facilities.

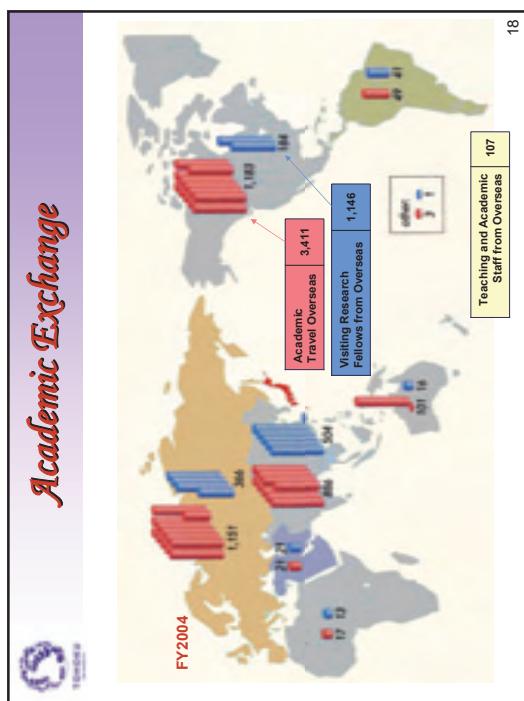
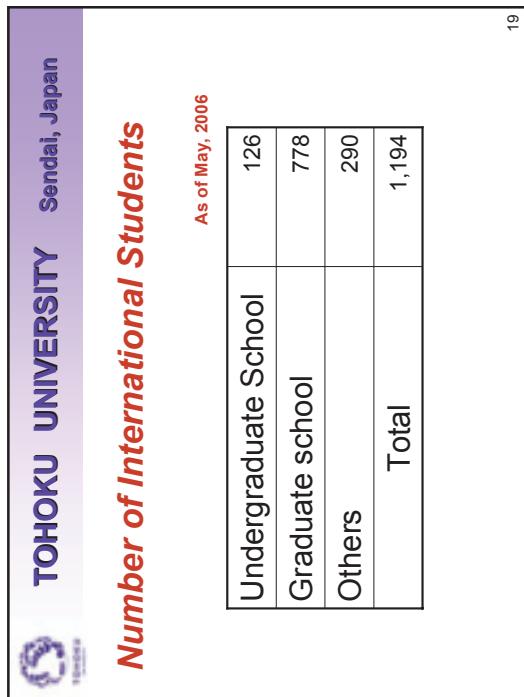
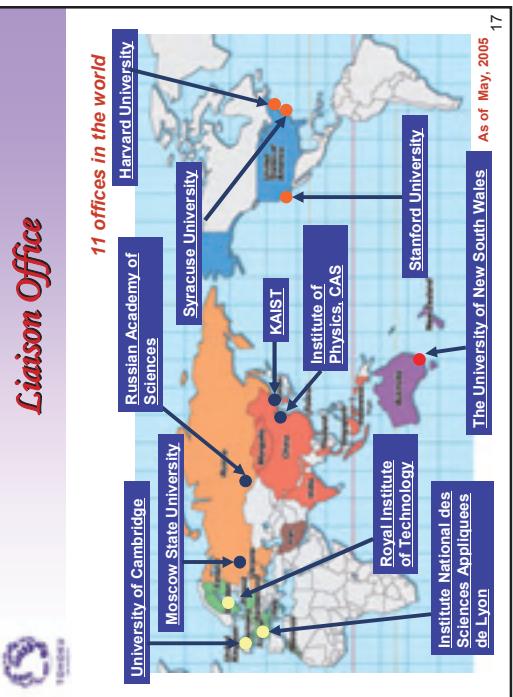
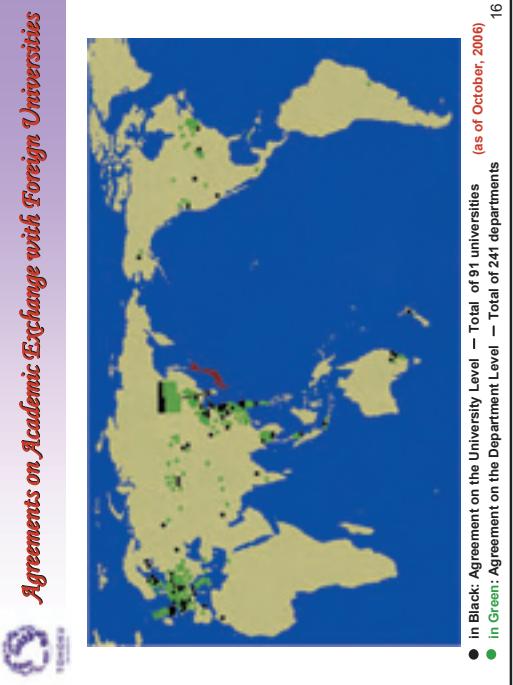
### Purpose

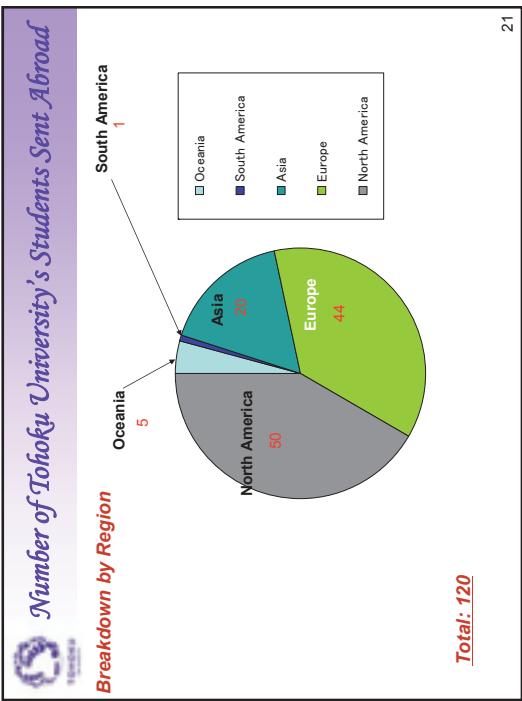
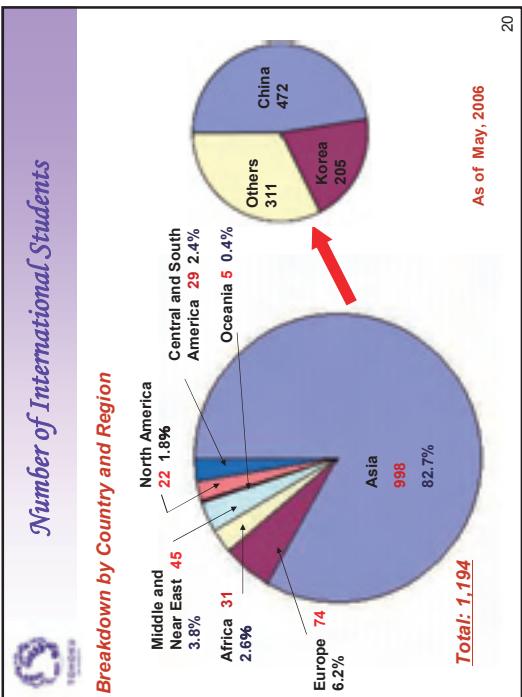
The Centre is aimed to create an environment for academic staff in establishing Tohoku University as an internationally competitive university highly acclaimed with world-class research and education and to ensure that the university is well-equipped to maintain a position of excellence in the global academic community.

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15





**How to foster students  
Interact with  
global academic community actively**

 22

- Participation in Conventional Exchange Program**  
Collège doctoral franco-japonais (with French government)  
Programme 8  
Short-term (within 1 year) exchange with partner universities
- New Joint Educational Initiatives with Prominent Higher Educational Institutions overseas**  
Double Degree Programs with French Grandes Écoles  
Joint Education Program with Tsinghua University
- Providing of Scholarships and the practical language training courses (some significant issues still remain to be resolved)**

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**Exchange of well-selected students with  
Prominent Educational Institutions overseas**

- Double Degree Programs with French Grandes Écoles**  
These programs allow French and Japanese Students to obtain a Master Degree of Engineering or Science from Tohoku University and Diplôme d'ingénieur from French grandes écoles simultaneously.
- Joint Educational Program with Tsinghua University(China)**  
This program allows Chinese Students to obtain a Master degree of Engineering or Science from Tohoku University within a period of a year and a half by transferring acquired credits from Tsinghua University, and vice versa for Japanese Students.

**Joint Education Agreement  
with  
Tsinghua University**



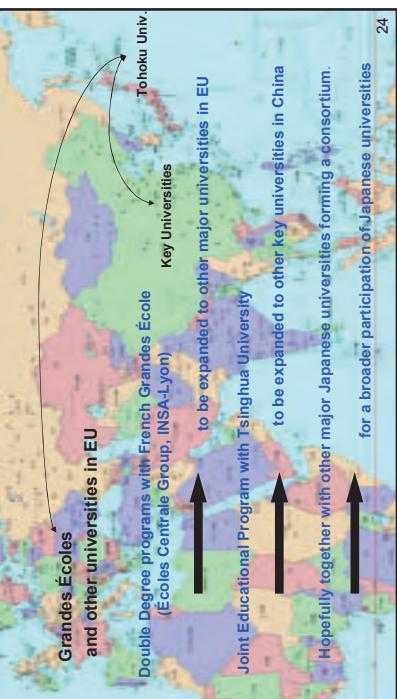
TOHOKU

**The 100th Anniversary of  
Tohoku University in 2007**



TOHOKU UNIVERSITY Sendai, Japan

**Broader-Based Global Exchange**



TOHOKU

**Agreement for Educational and Academic Cooperation  
with  
Écoles Centrale Group**



TOHOKU



## Target Goal

Tohoku University is aiming to become a “World’s Leading University” amongst the top 30 in the world.



Akihisa Inoue  
President and Academician  
Tohoku University

## **International Academic Exchange at National Tsing Hua University**

**Shih-Lin Chang**

National Tsing Hua University, Hsinchu, Taiwan 300

### **ABSTRACT**

To achieve academic excellence and broaden educational spectra, international academic exchange is one of the main focuses on which almost every university has put on a lot of efforts. At Tsing Hua University in Hsinchu, Taiwan, the international academic exchange program has been the major task of the Division of International and Continuing Education, which is under the Office of Academic Affairs. In this presentation the missions and strategies of this international program will be described and the current status be reported. Issues and challenges in promoting and pursuing international academic exchange will be also addressed.

## Outlines

### International Academic Exchanges at National Tsing Hua University

Shih-Lin Chang  
National Tsing Hua University, Hsinchu, Taiwan

2.01, 2007

National Tsing Hua University

National Tsing Hua University

1

2

- Missions
- Statistics of international students
- Statistics of exchange students
- Strategies
- Future goals
- Issues and suggestions

## Missions

- Achieve academic excellence recognized internationally

- Train outstanding students with global view

- Encourage students to study abroad

- Recruit more international students

- Enhance teaching and research excellence

National Tsing Hua University

3

National Tsing Hua University

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## Statistics of International Students

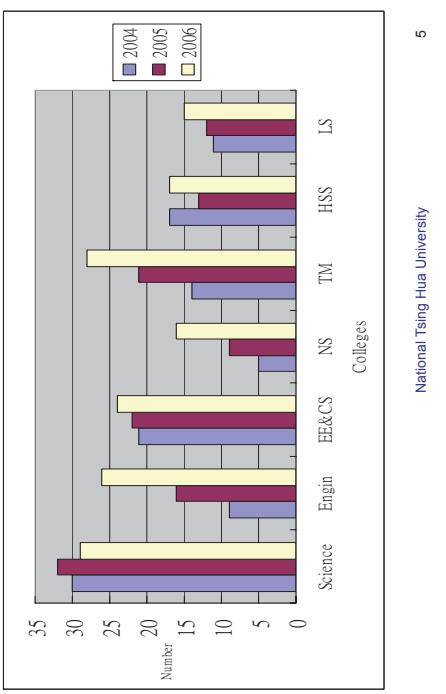
### 2004-2006 Profile of International Students

| Year | Number of International Students | Total  | Students of NTU | Ratio of International Students at NTU |
|------|----------------------------------|--------|-----------------|--|
|      | Bachelor                         | Master | Doctoral        |  |
| 2004 | 23                               | 40     | 44              | 107                                    |
| 2005 | 25                               | 47     | 53              | 125                                    |
| 2006 | 33                               | 60     | 62              | 155                                    |
|      |                                  |        |                 | 11014                                  |

- Goal : Increase 50 international students per year and reach 3% ratio in 2010



## Statistics of International Students



5

National Tsing Hua University

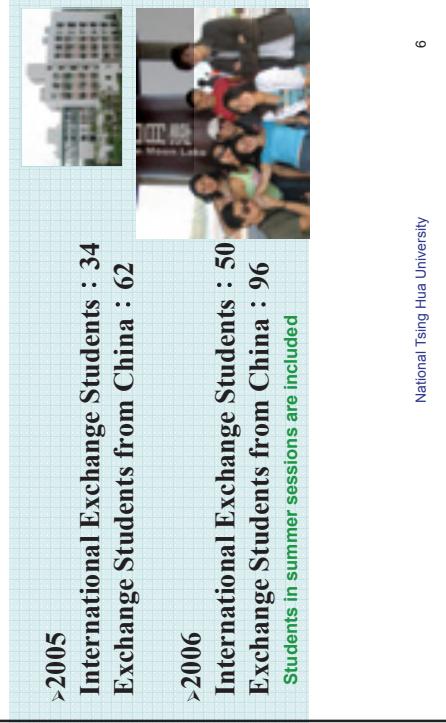
## Strategies

- Develop dual degree programs
- Scholarships for studying abroad
- Scholarships for studying in China
- Scholarships for international students
- On-line application system for international students
- Offer programs specifically for International students
- Encourage faculties to teach courses in English
- Tuition waive for exchange students
- Establish offices for international affairs

National Tsing Hua University

7

## Statistics of Int'l Exchange Students



6

National Tsing Hua University

## Strategy: Develop Dual Degree Programs

### Department / Institute

- National Tsing Hua University
  - Physics
  - Materials Science and Engineering
  - College of Electrical Engineering and Computer Science
- Linkoping Institute of Technology
  - Master's Program in System-on-Chip for Communication and Media (SOCWARE)
  - Master's Program in Materials Physics and Nanotechnology

National Tsing Hua University

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## Strategy: Develop Dual Degree Programs

### Degree Plan and Requirements

- > Study Abroad : First semester of senior year
- > Study Period : 2 years
- > Degree Requirements : Complete undergraduate courses in  
NTHU
  - Take graduate level courses and thesis  
in Linkoping University
- > Degree Awarded: Bachelor of National Tsing Hua University  
Master of Linkoping University

National Tsing Hua University 9

## Strategy: Scholarship for Studying Aboard

### NTHU Scholarship for International Exchanges

- > Objective : students gain global view and international experiences
- > Qualification : sophomores
- > Quota : 8 students per year
- > Study period : one year



National Tsing Hua University 10

## Strategy: Scholarship for Studying Aboard

### MOE Taiwan Merit Scholarship

- > Objectives : students enhance research experiences, skills, and/or knowledges
- > Qualification : undergraduate and graduate students
- > Study period : 3 months to 1 year
- > Visit labs and/or take non-degree courses

National Tsing Hua University 11

## Strategy: Scholarship for Studying Aboard



- > Objective : academic exchanges between Taiwan and China
- > Qualification : sophomores or juniors
- > Quota : 60~70
- > Study period : 6 weeks in summer session
- > NTHU establishes the exchange program of undergraduate research with the following 10 universities in China
  - 1. Peking University 6. Zhe-Jiang University
  - 2. Tsinghua University 7. Harbin University
  - 3. Fudan University 8. Xian Jiaotong University
  - 4. Lanzhou University 9. China University of Sci.& Tech.
  - 5. Soochow University 10. Shandong University

National Tsing Hua University 12

## Strategy: Scholarship for Studying Aboard

- > Taiwan Scholarship  
2006 Recipients : 37
- > Scholarship of International Cooperation and Development Fund (ICDF) 2006 Recipients : 23
- > Scholarship of Taiwan International Graduate Program (TIGP) 2006 Recipients : 19
- > Tsing Hua International Student Scholarship  
2006 Recipients : 59

89% of international students receive one of the scholarships.

National Tsing Hua University

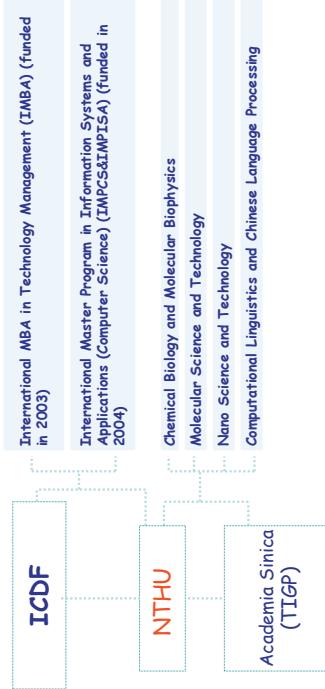
13

## Strategy: On-Line Application System for International Students



## Strategy: International Programs

NTHU cooperates with ICDF and Academia Sinica to establish programs in English



National Tsing Hua University

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## Strategy: International Programs

Number of Students in ICDF's Program

| Year | IMBA | IMPCS                       | IMPISA |
|------|------|-----------------------------|--------|
| 2003 | 5    |                             |        |
| 2004 | 4    | 2                           |        |
| 2005 | 7    | 3                           |        |
| 2006 | 7    | IMPICS is renamed as IMPISA | 6      |

National Tsing Hua University

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## Strategy: Courses Offered in English

11% of Courses Offered in English in 2006

| Academic Year        | Courses Offered in English | Number of Courses Offered (Professional Courses) | Ratio of Courses Offered in English Professional Courses |
|----------------------|----------------------------|--|--|
| 2006 Spring Semester | 142                        | 1363   | 10.4%  |
| 2006 Fall Semester   | 158                        | 1385   | 11.4%  |

> Incentive for offering courses in English (one of three)

- Financial support for TA's
- Financial support on teaching materials
- 50% more course credits

National Tsing Hua University

17

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## Strategy: Tuition Waive and Scholarship for Exchange Students

- > Application deadline : six weeks prior to the study
- > Study period : fall semester, spring semester, and/or summer session
- > Students from sister universities can waive tuition and credit fees
- > Exchange student scholarship



National Tsing Hua University

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## Strategy: Offices for International Affairs

| Office   | Function   |
|--|--|
| Office of Research and Development<br>Division of Academic Cooperation           | * MOU and agreements with sister universities<br>* Guest visit   |
| Office of Academic Affairs<br>Division of International and Continuing Education | * Admissions for international students and exchange students<br>* Documents for visa applications<br>* Scholarships for studying abroad |
| Office of Student Affairs<br>Division of Overseas and Foreign Student Affairs    | * Provide assistance in living, international student activities, and etc.<br>* Scholarships for international students                  |

University Center on International Affairs for the coordination of international affairs

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## UCIA



University Center  
of  
International Affairs

## Goals

**Number of International Students Reaching 3%**



**15% of Courses Taught in English**

**Achieve Academic Excellence Recognized Internationally**

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## Issues and Suggestions (1/6)

- ◆ Not many people are familiar with NTHU, which limits the number of international applications.
  - Aggressively attend education fairs and visit foreign universities to recruit international students.
- ◆ Tuition and living expenses in NTHU might be expensive for international students from developing countries.
  - Provide scholarships and part-time jobs for international students.

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## Issues and Suggestions (2/6)

- ◆ Students from some countries are difficult to obtain Taiwan visa.
  - Ministry of Education should help international students to resolve any visa problem.
- ◆ Only 10% of all courses are offered in English.
  - Provide more incentives for professors to offer courses in English and also more learning tools for local students to get used to English.

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## Issues and Suggestions (3/6)

- ◆ Mathematics and science backgrounds of some admitted international freshmen are not comparable with the backgrounds of local students.
  - Design mathematics and science evaluation sheets for international applicants to answer voluntarily.
- ◆ Courses in listening, speaking, reading, and writing Chinese language for international students are needed.
  - Establish more such courses to help international students to fit in Taiwan culture and the campus life.

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## Issues and Suggestions (4/6)

- ◆ The required General Education courses such as History, Constitution, and Sociology are very difficult for some international students.
  - Revise course requirements such that international students can take Chinese language courses instead of the General Education courses.
  - ◆ Dormitories do not have sufficient facilities to accommodate different cultures and living habits of international students.
    - Build or remodel dormitories in the consideration of international students.

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## Issues and Suggestions (5/6)

- ◆ Most documents and University regulations do not print in English.
  - Require all documents and regulations to have English versions.
  - ◆ Few living and travel information such as food menu and directions are created specifically for international students.
    - Encourage local students to collect materials and establish web sites that provide information for foreigners.

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Thank you

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## Issues and Suggestions (6/6)

- ◆ Tuitions of foreign universities may not be affordable for our students.
  - Establish more sister universities with MOU that offers tuition waive for our exchange students.
  - ◆ Our students do not have strong motivation to study aboard.
    - Encourage students to study aboard by providing more scholarships, English learning courses, and international fairs.

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